

Selenium System Testing of SMW

Status

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What is it?

- At SMWCon in Amsterdam I presented Selenium System testing as a means to increase quality of SMW/extension code.
- System Tests are black box tests of SMW's functionality
- For web-based software, typically, a web browser is remote controlled
- Selenium is system testing framework

What is it good for?

- Especially suited for **regression tests**: Does my new code/extension break anything of MW/SMW?
- **Test-driven development**: Specify functionality as tests against to evaluate

Why Selenium?

- OpenSource, commonly used, e.g., in StudiVZ
- Wikimedia Foundation has supported it and put it into MW core.
 - Currently, on hold. Still evaluating possible alternatives.
 - Could provide infrastructure for Continuous Integration.
- Selenium IDE helps to create tests, for programmers AND also for Non-Programmers

Programmers

- Simple code to remote control a browser

```
$this->type("searchInput", "Property:YesOrNo");  
$this->click("searchGoButton");  
$this->waitForPageToLoad("10000");  
$this->click("link=Delete");  
$this->waitForPageToLoad("10000");  
$this->click("wpConfirmB");  
$this->waitForPageToLoad("10000");
```

Non-Programmers

■ Recording tests with a browser

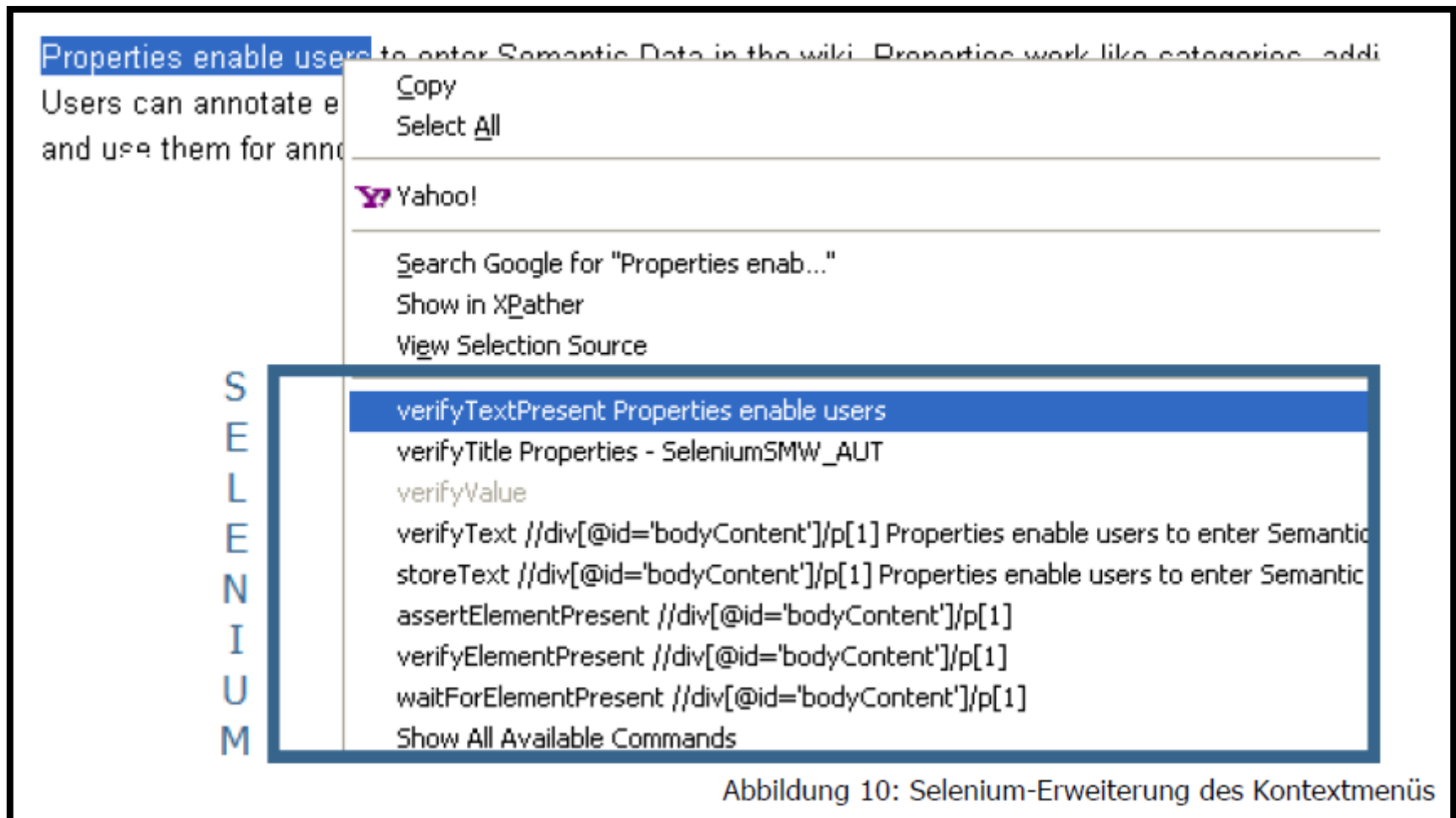


Abbildung 10: Selenium-Erweiterung des Kontextmenüs

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■ Tests

- 28 system tests, e.g., AnnotatePageWithProperty, MakePropertySubproperty

<http://svn.wikimedia.org/viewvc/mediawiki/trunk/extensions/SemanticMediaWiki/tests/>

■ HowTos

- How to run System Tests
- How to create System Tests

■ Check it out & Happy testing!

- http://www.semantic-mediawiki.org/wiki/SMW_System_Testing_with_Selenium